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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/418,791	10/15/1999	RAJESH NAIR	DGR-102J	9339

7590 05/08/2003  
LANDIORIO & TESKA  
260 BEAR HILL ROAD  
WALTHAM, MA 024511018

EXAMINER

DICKENS, CHARLENE

ART UNIT	PAPER NUMBER
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2855

DATE MAILED: 05/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/418,791

Applicant(s)

NAIR et al.

Examiner

DICKENS

Group Art Unit

2855

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

☒ Responsive to communication(s) filed on 2-13-03

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

☒ Claim(s) 1-14 is/are pending in the application.

Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☒ Claim(s) 1-10 is/are allowed.

☒ Claim(s) 11-14 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☐ All ☐ Some\* ☐ None of the:

☐ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_

☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☒ Notice of Reference(s) Cited, PTO-892

☐ Notice of Informal Patent Application, PTO-152

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Other \_\_\_\_\_

Office Action Summary

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/13/03 has been entered.
2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
3. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolodjski (US Pat. 4,787,251) in view of Hultgren (US Pat. 4,722,611). Kolodjski discloses an air flow sensor and a method of determining heat transfer rate comprising: a temperature dependent resistor device (6,7); means for applying a voltage to the temperature dependent resistor device until it reaches a first temperature, including a first circuit (Fig. 5); means for determining when the temperature dependent resistor device then cools to a second lower temperature, including a

second circuit (Fig. 5). Kolodjski does not disclose a time period that it takes the temperature dependent resistor device to change from a first temperature to a second temperature to determine the heat loss rate of the temperature dependent resistor device. Hultgren disclose a time period that it takes the temperature dependent resistor device to change from a first temperature to a second temperature to determine the heat loss rate of the temperature dependent resistor device (Figs. 4-7) for the purpose of providing a flow rate measuring device for sensing the relative heat transfer characteristics of a media. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a time period that it takes the temperature dependent resistor device to change from a first temperature to a second temperature to determine the heat loss rate of the temperature dependent resistor device in Kolodjski as taught by Hultgren for the purpose of providing a flow rate measuring device for sensing the relative heat transfer characteristics of a media.

4. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Kolodjski, as applied to claim 11 above, in further view of Kleinhans. Claims 12 and 13 differ from the modified Kolodjski with the recitations of separate comparators and variable resistance. Separate comparators serves the purpose of comparing the outputs of the


two bridge circuits. Kolodjski does not use separate comparators. Nevertheless, Kolodjski does make use of a comparator 22 for the purpose of comparing the outputs of the two bridge circuits to sense which sensor has experienced a shift in calibration (col. 2, lines 35-35). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have separate comparators in the modified Kolodjski for the purpose of comparing the outputs of the two bridge circuits to sense which sensor has experienced a shift in calibration (col. 2, lines 35-35). Kleinhans discloses the use of variable resistance, i.e.,  $R_1$ , for the purpose of varying the amount of resistance applied to a sensor device in order to measure the flow rate of a flowing fluid mass (Abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made use of variable resistance in the modified Kolodjski as taught by Kleinhans for the purpose of varying the amount of resistance applied to a sensor device in order to measure the flow rate of a flowing fluid mass (Abstract).


5. Claims 1-10 are allowed over the prior art. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not teach nor suggest a first variable resistance leg of a first circuit and a second variable resistance leg of a second circuit both include a temperature

dependent resistance device and a processor connected to both first and second comparators in combination with the other recited claimed features.

6. Applicant's arguments with respect to the claim have been considered but are moot in view of the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Dickens whose telephone number is (703) 305-7047. Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist or the customer service representative whose telephone numbers are (703) 308-0956 or (703) 308-4800 respectively. The fax numbers are (703) 305-3431 and (703) 305-3432.

  
cd/dickens  
May 5, 2003

  
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